

REMARKS

Claims 1-23 are pending in this application.

Claims 1 and 11 stand rejected under 35 USC 102(b) as anticipated by Gallagher U.S. Patent No. 5,640,343. Claims 2-10 and 12-23 were rejected under 35 USC 103(a) as unpatentable over Gallagher in view of Yagishita U.S. Patent Pub. No 2002/0179980. Applicant respectfully traverses these rejections.

Representative claim 1 recites a number of elements in combination. A memory cell includes a variable resistive element and a current control element controlling a current flowing in the variable resistive element. A resistance value of the variable resistive element is varied by applying a voltage to both ends of the variable resistive element and is stored as information by the variable resistive element. The current control element includes a Schottky diode.

This same combination of elements is absent from Gallagher. The Action states:

Gallagher discloses a MRAM (Fig. 2) that contains a memory cell comprising a variable resistive element and a current control element controlling a current flowing in variable resistive element wherein variable resistive element has a resistance value which is varied by applying a voltage to both ends of the variable resistive element and is stored as information by the variable resistive element (Column 5, lines 18-40) and the current control element is an Schottky diode. In regards to the variable resistive element storing information, since this is a memory device and the variable resistive element is the memory element then it would store information. In addition, a voltage is applied to the variable resistive element that varies the resistance of the variable resistive element. (Column 5, lines 18-40).

Applicant respectfully disagrees and believes that the Action may have misapplied the cited section of Gallagher (col. 5, lines 18-40). Based on this section in Gallagher, the Action states that Gallagher describes a resistance value of a variable resistive element that is varied by applying voltage, and that this feature is relevant to the storage of information.

However, the MRAM of Gallagher is basically a conventional MRAM. Accordingly, as a conventional MRAM, varying the direction of a magnetic field within a memory cell corresponds to storing of information in the MRAM, including Gallagher's MRAM. On the

other hand, as required by applicant's claim 1, the resistance value itself of the variable resistance element is stored as information. In Gallagher, the variable resistance is not "stored as information by said variable resistive element," as recited in claim 1.

Claim 11 distinguishes over Gallagher for at least the same reason as claim 1, since claim 11 recites "a variable resistive element which resistance value is varied by applying a voltage to both ends of said variable resistive element and is stored as information by said variable resistive element."

To anticipate a claim, the reference must teach every element of the claim. MPEP 2131. The standard for the anticipation analysis is that "[e]very element of the claimed invention must be literally present, arranged as in the claim. ... The identical invention must be shown in as complete detail as is contained in the patent claim." *Richardson v. Suzuki Motor Co., Ltd.*, 868 F.2d 1226, 1236 (Fed. Cir. 1983). Since Gallagher fails to teach every element of claims 1 and 11, it fails to anticipate claims 1 and 11. Accordingly, the rejection of claims 1 and 11 should be withdrawn. This logic also disposes of the rejections of claims 2-10 and 12-23, which depend directly or indirectly from claims 1 or 11.

Since Gallagher does not provide the teachings for which it is cited, and thus the combination of Gallagher and Yagishita does not result in the claimed combination, the obviousness rejection of claims 2-10 and 12-23 should be withdrawn for this additional reason.


In view of the above, all of the claims in this application are in condition for allowance. Accordingly, applicant solicits early action in the form of a Notice of Allowance.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing Docket No. 544782000300.

Respectfully submitted,

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